CLAIMS

scan.

- 1. (Previously Presented) A tomographic system comprising:
 - a rotatable gantry having a bore centrally disposed therein;
- a table movable within the bore and configured to position a subject for tomographic data acquisition within the bore;
- a high frequency electromagnetic energy projection source positioned within the rotatable gantry and configured to project high frequency electromagnetic energy toward the subject;
- a detector array disposed within the rotatable gantry and configured to detect high frequency electromagnetic energy projected by the projection source and impinged by the subject; and

at least one sensor to provide subject-position feedback.

- 2. (Original) The system of claim 1 wherein at least one sensor includes at least one of a laser sensor and a sonic sensor.
- 3. (Original) The system of claim 1 further comprising a computer programmed to:

perform at least one scout scan; and associate the subject-position feedback with data derived from the scout

- 4. (Original) The system of claim 3 wherein the computer is further programmed to determine at least one of a projection area (PA), a projection measure (PM), and an oval ratio (OR) from the subject-position feedback and the data derived from the scout scan.
- 5. (Original) The system of claim 3 wherein the computer is further programmed to determine an elevational offset of the subject from the table.

6. (Original) The system of claim 3 wherein the computer is further programmed to dynamically control attenuation characteristics of a pre-subject attenuation filter such that the attenuation characteristics match a desired attenuation profile.

- 7. (Previously Presented) The system of claim 6 wherein the desired attenuation profile is determined from the at least one scout scan.
- 8. (Original) The system of claim 1 wherein the position feedback includes subject-contour feedback.
- 9. (Withdrawn) A computer readable storage medium having stored thereon a computer program representing a set of instructions which, when executed by at least one processor, cause the at least one processor to:

receive feedback regarding a subject position from at least one sensor of an imaging device; and

determine a centering error from the feedback.

- 10. (Withdrawn) The computer readable storage medium of claim 9 wherein the imaging device includes a medical imaging device.
- 11. (Withdrawn) The computer readable storage medium of claim 9 wherein the at least one processor is further caused to determine an adjustment in a table elevation relative to isocenter to reduce the centering error.
- 12. (Withdrawn) The computer readable storage medium of claim 9 wherein the at least one processor is further caused to associate the feedback with data received from a scout scan.

13. (Withdrawn) The computer readable storage medium of claim 9 wherein the at least one processor is further caused to determine at least one of a PA, a PM, and an OR from the subject-contour feedback and the data derived from the scout scan.

- 14. (Withdrawn) The computer readable storage medium of claim 9 wherein the sensors include at least one of a laser sensor and a sonic sensor.
- 15. (Withdrawn) The computer readable storage medium of claim 9 wherein the at least on processor is further caused to determine a lateral repositioning value for subject recentering from the feedback.
- 16. (Withdrawn) The computer readable storage medium of claim 9 wherein the at least on processor is further caused to determine an attenuation profile of an attenuation filter.
- 17. (Withdrawn) The computer readable storage medium of claim 16 wherein the at least on processor is further caused to determine an attenuation pattern over a scan duration.
- 18. (Withdrawn) The computer readable storage medium of claim 9 wherein the at least on processor is further caused to determine a projection error ratio from the positioning information.
 - (Withdrawn) A method of imaging comprising the steps of: positioning a subject in an imaging device;

collecting positioning information of the subject from at least one sensor disposed in proximity to the imaging device; and

determining a relative position of the subject within the imaging device from at least the position information.

20. (Withdrawn) The method of claim 19 further comprising the step of determining a table elevation relative to isocenter.

- 21. (Withdrawn) The method of claim 20 further comprising the step of determining a centering error of the subject in at least one direction.
- 22. (Withdrawn) The method of claim 21 further comprising the step of repositioning the subject to reduce the centering error.
- 23. (Withdrawn) The method of claim 22 further comprising the step of adjusting table elevation to reduce the centering error.
- 24. (Withdrawn) The method of claim 19 wherein the at least one sensor is disposed in a bore of the imaging device.
- 25. (Withdrawn) The method of claim 19 further comprising the step of acquiring medical diagnostic data of the subject.
- 26. (Withdrawn) The method of claim 19 further comprising the step of detecting a top surface position of the subject from the positioning information.
- 27. (Withdrawn) The method of claim 26 further comprising the step of determining from the top surface position an elevational offset of the subject.
- 28. (Withdrawn) The method of claim 27 further comprising the step of performing a scout scan.
- 29. (Withdrawn) The method of claim 28 further comprising the step of determining the relative position from data acquired during the scout scan.

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- 30. (Withdrawn) The method of claim 19 wherein the positioning information includes vector position information.
- 31. (Withdrawn) The method of claim 19 further comprising the step of adjusting an attenuation characteristic of an attenuation filter according to the determined position of the subject.
- 32. (Withdrawn) The method of claim 19 further comprising the step of determining at least one of a PA, a PM, and an OR from the position information.